

---

**Prospect Mine  
Pre-CERCLIS Screening Trip Report  
Whatcom County, Washington  
TDD: 03-01-0002**

---

Contract: 68-S0-01-01  
September 2004

Region 10  
***START-2***

Superfund Technical Assessment and Response Team

Submitted To: Joanne LaBaw, Task Monitor  
United States Environmental Protection Agency  
1200 Sixth Avenue  
Seattle, Washington 98101

## TRIP REPORT

DATE: September 16, 2004  
TO: Joanne LaBaw, Task Monitor, EPA, Mail Stop ECL-115  
FROM: Mark Longtine, Project Manager, E & E, Seattle, WA  
SUBJ: Prospect Mine Pre-CERCLIS Screening  
REF: Contract No. 68-S0-01-01, Technical Direction Document No. 03-01-0002

### Place Visited:

Site Name:	Prospect Mine
CERCLIS ID No.:	Not applicable
Location:	Whatcom County, Washington
Latitude:	Not known
Longitude:	Not known
Legal Description:	Section 25, Township 38 North, Range 3 East, Willamette Meridian
Congressional District:	Washington
Site Owner:	Not known
Site Contact:	Not known

### Purpose of Trip:

Site reconnaissance visit for pre-Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) screening.

### Persons Responding:

Mark Longtine, Ecology and Environment, Inc., Seattle, Washington.  
Joanne LaBaw, United States Environmental Protection Agency (EPA), Seattle, Washington  
Deborah Neal, EPA, Seattle, Washington

### Persons Contacted:

Property owners in the general vicinity of former prospect were contacted.

### Site Owners:

The location of the site was not determined; therefore, site owners were not identified.

Date of Trip:

May 15, 2003

**BACKGROUND**

A pre-CERCLIS screening was performed at the Prospect Mine, located in Whatcom County, Washington. The EPA is conducting preliminary assessments (PAs) and pre-CERCLIS screenings at several coal mines in the Bellingham/Lake Whatcom area, Washington. The purpose of the PAs and pre-CERCLIS screenings is to determine whether the mines pose a threat to public health or the environment, and to determine whether environmental cleanup is needed. The EPA is conducting the PAs and pre-CERCLIS screenings in response to a citizens' petition filed by two environmental groups in Bellingham, the Environmental Exposure Network and the Clean Water Alliance. These groups contend the mines may contain pollutants, such as mercury and heavy metals.

**SITE DESCRIPTION/OWNERSHIP HISTORY**

The environmental groups that requested the pre-CERCLIS screening indicated the presence of an abandoned coal mine referred to as the "Prospect Mine" located directly on Lake Whatcom. The approximate location of the Prospect Mine is illustrated in Figure 1. No information on a "Prospect Mine" anywhere in the Bellingham/Lake Whatcom area has been located. The most likely reason for this is that no coal mine of that name ever existed in the Bellingham/Lake Whatcom area. However, coal prospecting has been reported at several areas around Lake Whatcom, including several locations along the lake shore. The most complete information on coal mining and prospecting in the general area is provided by Olaf Jenkins, who prepared the *Geological Investigation of the Coal Fields of Western Whatcom County, Washington* (Jenkins 1923) for the State of Washington Department of Conservation and Development, Division of Geology. Jenkins (1923) reports that "there are said to be a number of coal prospects in the region of Woodlawn." Woodlawn was located in the northeast ¼ of Section 25, Township 38 North, Range 3 East (USGS 1908). The present name of Woodlawn is Agate Bay (USGS 1994). Jenkins (1923) reports that the prospects "have evidently been abandoned and are now obliterated by a thick growth of vegetation." No other information on the prospects has been located during the pre-CERCLIS screening.

Available historical documents do not indicate who owned the property on which the prospecting occurred. Despite considerable effort, the physical location of the prospect could not be determined (see

the “START-2 ACTIONS” section below). For these reasons, the ownership history of the property on which the mining/prospecting occurred could not be determined.

## **SITE OPERATIONS AND WASTE CHARACTERISTICS**

No information on the operations at Prospect Mine is available. Based on review of all available information, mining activity was likely limited to prospecting. Based upon Jenkins’ (1923) observations, it is likely that the prospecting ceased well prior to 1922, and that the prospect workings were small in size.

## **START-2 ACTIONS**

To obtain information about coal mining in the Bellingham/Lake Whatcom area, including the suspected area of the Prospect Mine, START-2 reviewed numerous reports, maps, and other documents. In addition, START-2 conducted interviews with representatives of federal, state, and local agencies; representatives of academic institutions; and owners or representatives of properties in the vicinity of the former coal mining activities. A list of these data sources for the Bellingham/Lake Whatcom Coal Mines PA/pre-CERCLIS screening project is provided in Appendix A.

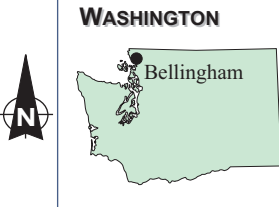
Little documentation or other information regarding the Prospect Mine was obtained as a result of the information gathering efforts. All pertinent information gathered has been incorporated into this trip report, and was used to guide efforts to physically locate the mine(s)/prospect(s) during site reconnaissance visits performed by the START-2. On May 15, 2003, the START-2 and representatives from EPA visited the area in the suspected vicinity of the Prospect Mine. The area was observed to be developed for residential use. No evidence of coal mining was noted.

## **CONCLUSIONS**

Available historical information indicates that coal mining activities were limited to prospecting. No evidence of coal mining activities were noted during the May 15, 2003, site visit. No sources or evidence of contamination of any kind (e.g., stained soil, distressed vegetation) were observed during the site visit.



Source: Maptech, Inc. 2001.





## REFERENCES

- Jenkins, Olaf P., 1923, *Geologic Investigation of the Coal Fields of Western Whatcom County, Washington*, Bulletin No. 28 (Geological Series), State of Washington Department of Conservation and Development, Division of Geology.
- Maptech, Inc., 2001, *Terrain Navigator 2001*, Washington: San Juan Islands/Olympic Peninsula/Sea-Tac, Andover, Massachusetts.
- United States Geological Survey (USGS), 1994, *Lawrence, Washington Quadrangle*, 7.5-Minute Series Topographic Map.
- , 1908, *Sumas, Washington Quadrangle*, 1:62,500 Topographic Map.

**APPENDIX A**  
**PROJECT DATA SOURCES**

## PROJECT DATA SOURCES:

### DOCUMENTS AND MAPS

- Batchelor, Carl F., 1982, *Subsidence Over Abandoned Coal Mines, Bellingham, Washington*, Master's Thesis, Western Washington University, Bellingham, Washington.
- Beikman, Helen M., Howard D. Gower, and Toni A.M. Dana, 1961, *Coal Reserves of Washington*, Bulletin 47, State of Washington Department of Natural Resources, Division of Geology and Earth Resources.
- BEK Purnell Engineering, Inc., 1998, *Report: Geotechnical Engineering Investigation, Proposed Railroad Avenue Parking Garage, Bellingham, Washington*, for City of Bellingham Parking Services.
- Bellingham Coal Mine Co., 1939, *Bellingham Coal Mines, Mine No. 1*, 1:1200 map of roads, railroad tracks, buildings, streams, mine workings, borehole locations, and market location.
- Bellingham Public Libraries, 1926, *A History of Bellingham, Washington, Compiled from Newspaper Articles, City Directories, and Books of Local History*.
- Blue Canyon Coal Mining Company, 1902, Map Showing Mine Workings of the Blue Canyon Coal Mining Co., 1:2400 map showing roads, railroad tracks, buildings, streams, elevations, and mine workings.
- Browne, J. Ross, 1869, *Resources of the Pacific Slope*.
- Brownfield, Michael E., et al., 1994, *High Chromium Contents in Tertiary Coal Deposits of Northwestern Washington - A Key to Their Depositional History*, International Journal of Coal Geology 27, pp. 153-169.
- Campbell, R.R., circa 1904, *Map of Whatcom County*, 1:158,400.
- Cecil, C. Blaine and Susan Tewalt, 2002, United States Geological Survey (USGS), *Coal Extraction - Environmental Prediction*, USGS Fact Sheet 073-02, Online Version 1.0, accessed through the Internet at <http://pubs.usgs.gov/fs/fs073-02/fs073-02.html>.
- Corey, T. B., 1896, *The Coal Resources of Washington, Mining*, Vol. 1, No. 5, pp.231-239.
- Courtney, Dale Elliot, 1950, *Bellingham: An Urban Analysis*, Master's Thesis, University of Washington, Seattle, Washington.
- Daniels, Joseph, 1934, *Coal in Washington, Distribution, Geology, Mining, Preparation, Uses, and Economic Value of Coal Resources in Washington*, Bulletin, University of Washington Engineering Experiment Station, Report No. 3.
- Easterbrook, Don J., 1973, *Environmental Geology of Western Whatcom County, Washington*.



- Easterbrook, D., 1976, *Geologic Map of Western Whatcom County, Washington*, United States Geological Survey Map I-854-B, scale 1:62,500.
- Edson, Lelah Jackson, 1968, *The Fourth Corner, Highlights from the Early Northwest*.
- Evans, G.W., 1908, *Report on the Whatcom County Company's Coal Mine at Blue Canyon, Washington*.
- GeoEngineers, LLC, May 27, 2003, *Preliminary Geotechnical Engineering Services, Proposed Laurel Street Development*, submitted to NJB Development, LLC.
- GeoEngineers, April 5, 2004, *Upland Remedial Investigation Work Plan*, R.G. Haley International Corporation Site, Bellingham, Washington.
- Goodyear, W.A., 1877, *The Coal Mines of the Western Coast of the United States*, A.L. Bancroft & Company, San Francisco, California.
- Green, Stephen H., 1943, *Coal and Coal Mining in Washington, Report of Investigations No. 4*, State of Washington Department of Conservation and Development, Division of Mines and Mining.
- Green, Stephen H., 1947, *Coal and Coal Mining in Washington, Report of Investigations No. 4R (Revision of R. I. 4)*, State of Washington Department of Conservation and Development, Division of Mines and Mining.
- Hincks, E.S., 1891, *Map of Whatcom County, Washington*, 1: 84,000.
- HRB-Singer, Inc., Energy and Natural Resources Program Department, November 1977, *The Nature and Distribution of Subsidence Problems Affecting HUD and Urban Areas (Task A)*, prepared for the United States Department of Housing and Urban Development under Contract Number H-2385.
- HRB-Singer, Inc., Energy and Natural Resources Program Department, June 1977, *Proposed Techniques for Evaluation Subsidence Risk and Planning and Engineering Alternatives for Use by HUD and Local Governments (Task E)*, prepared for the United States Department of Housing and Urban Development under Contract Number H-2385.
- Hunsby, George, January 11, 1994, "Coal Mine Shaft on Holly Street Was Bottomless Pit," *Bellingham Herald*.
- Jenkins, Olaf P., 1923, "Geologic Investigation of the Coal Fields of Western Whatcom County, Washington," Bulletin No. 28 (Geological Series), State of Washington Department of Conservation and Development, Division of Geology.
- Koert, Dorothy and Biery, Galen, 1982, *Looking Back*, Volume 2.
- Landes, Henry, 1902, *The Coal Deposits of Washington*, Washington Geological Survey, Volume I, Annual Report for 1901, Part IV.

- Lapen, Thomas J., 2000, Geologic Map of the Bellingham 1:100,000 Quadrangle, Washington, Washington State Department of Natural Resources, Division of Geology and Earth Resources, Open File Report 2000-5.
- LaSalata, Frank V., Mark C. Menard, Timothy J. Walsh, and Henry W. Schasse, 1984, *Inventory of Abandoned Coal Mines in the State of Washington*, Open File Report 84-6, State of Washington Department of Natural Resources, Division of Geology and Earth Resources, prepared for U.S. Department of the Interior, Office of Surface Mining, Abandoned Mine Land Program.
- Martini, Russel F., 1964, *Inventory of Minerals (Metallic and Nonmetallic) and Ground Surface Water of Whatcom County, Washington*, Whatcom County Industrial Development Council, Inc.
- Moen, Wayne S., 1969, "Mines and Mineral Deposits of Whatcom County, Washington," Bulletin No. 57, State of Washington, Department of Natural Resources, Division of Mines and Geology.
- Moen, Wayne S., 1982, "The Mineral Industry of Washington - Highlights of Its Development, 1853-1980," Information Circular 74, State of Washington Department of Natural Resources, Division of Geology and Earth Resources.
- Moore, F. Stanley, 1973, *An Historical Geography of the Settlement around Lake Whatcom Prior to 1920*, Technical Report No. 21, Institute for Freshwater Studies, Western Washington State College.
- Mullen, J.T., Jr., 1939, Memorandum, "The Coal Fields of Washington."
- Packard, Frank A., Skinner, Earl L., and Fuste, Luis A., 1988, *Effects of Coal Mine Drainage on the Water Quality of Small Receiving Streams in Washington, 1975-77*, United States Geological Survey, Water Resources Investigations Report 85-4274.
- Prather, E.C., 1883, "Preliminary Plat of a Portion of The Bellingham Bay Coal Company's Property With the Town of Sehome and The Adjoining Towns of Whatcom and Bellingham in Whatcom County, Wash. Terr.," 1:4800.
- Pridgeon, Rodney, 1978, *The Coal Mining Industry in Washington: A Study in Historical and Economic Geography*, Masters thesis, Western Washington University.
- Rice, Dudley D., 1995, *Geologic Framework and Description of Coalbed Gas Plays*, accessed through the Internet at <http://certnetra.cr.usgs.gov/1995OGData/Cbm/CBM.pdf>.
- Rose, Arthur W. and Charles A. Cravotta III, 1999, *Geochemistry of Coal Mine Drainage, in Coal Mine Drainage Prediction and Pollution Prevention in Pennsylvania*, State of Pennsylvania Department of Environmental Protection.
- Roth, Lottie R. (ed.), 1926, *History of Whatcom County*, Vol. 1, Pioneer Hist. Publishing Company, Seattle, Washington.

- Schasse, Henry W., Lorraine M. Koler, Nancy A. Eberle, and Rebecca A. Christie, 1994, *The Washington State Coal Mine Map Collection: A Catalog, Index, and User's Guide*, Open File Report 94-7, State of Washington Department of Natural Resources, Division of Geology and Earth Resources.
- Smith, E. Eggleston, 1911, *Coals of the State of Washington*, Department of the Interior, United States Geological Survey, Bulletin 474.
- Stewart, Charles A., 1923, *Coals of Whatcom County, Washington, Their Geology, Character, and the Methods Employed in Mining Them*, Master's Thesis, State College of Washington, School of Mines and Geology, Department of Geology, Pullman, Washington.
- Tarr, R.P. 1907, "The Washington Coal Situation," *Engineering and Mining Journal*, v. 83, no. 21, p. 1010.
- Tetra Tech, Inc., 1984, *Final Report, Bellingham Abandoned Mine Land Survey*, prepared for U.S. Department of the Interior, Office of Surface Mining.
- Tewalt, Susan J., Linda J. Bragg, and Robert B. Finkelman, 2001, United States Geological Survey (USGS), "Mercury in U.S. Coal - Abundance, Distribution, and Modes of Occurrence," USGS Fact Sheet FS-095-01.
- The Weekly Blade*, August 12, 1903, "Rocky Ridge Coal Mine," newspaper article accessed via the Internet at <http://www.rootsweb.com/~wawhatco/newspapers/Blade.htm>.
- United States Department of the Interior, Bureau of Mines (BOM), 1969, "Disposal of Solid Wastes from Coal Mining in Washington, Oregon, and Montana," Information Circular 8430.
- United States Department of the Interior, General Land Office (GLO), 1873, cadastral survey, Township No. 37 North, Range No. 3 East Willamette Meridian.
- United States Department of the Interior, General Land Office (GLO), 1860, cadastral survey, Township No. 38 No. R. No. 3 E. Willamette Mer..
- United States Department of the Interior, General Land Office (GLO), 1874, cadastral survey, Township No. 38 North, Range No. 3 East Willamette Meridian.
- United States Department of the Interior, General Land Office (GLO), 1863, cadastral survey, Township No. 38 North Range No. 3 East Willamette Mer..
- United States Department of the Interior, General Land Office (GLO), 1884, cadastral survey, Township No. 37 North, Range No. 4 East Will. Mer., W. T..
- United States Department of the Interior, General Land Office (GLO), 1884, cadastral survey, Township No. 38 North, Range No. 4 East Will. Mer., W. T..
- United States Department of the Interior, General Land Office (GLO), 1859, survey notes of cadastral survey, Township 38 North Range 3 East.



United States Department of the Interior, General Land Office (GLO), 1873, survey notes of cadastral survey, Township 38 North Range 3 East.

United States Department of the Interior, General Land Office (GLO), 1874, survey notes of cadastral survey, Township 38 North Range 4 East.

United States Department of the Interior, Office of Surface Mining (OSM), 2003, Abandoned Mine Land Inventory System, database queries accessed through the Internet at <http://ismhdqa02.osmre.gov/OSM.HTM>.

United States Department of the Interior, Office of Surface Mining (OSM), 2003, Chemistry of Pyrite Weathering, accessed through the Internet at <http://www.osmre.gov/amdform.htm>.

United States Environmental Protection Agency (EPA), 2001, *Martin County Coal Corporation, Inez, Kentucky*, Task Force Report, October 2001.

United States Geological Survey (USGS), 2004, *Sources of Mercury in Sediments, Water, and Fish of the Lakes of Whatcom County, Washington*, Scientific Investigations Report 2004-5084.

United States Geological Survey (USGS), 1997, *Analytical Data, Sample Locations, and Descriptive Information, Analytical Methods and Sampling Techniques, Database Perspective, and Bibliographic References for Selected U.S. Coal Samples*, Open-File Report 97-134, accessed through the Internet at <http://pubs.usgs.gov/of/1997/of97-134>.

United States Geological Survey (USGS), 1908, Sumas, Washington topographic quadrangle, 1:62,500.

United States Geological Survey (USGS), 1918, Samish Lake, Washington topographic quadrangle, 1:62,500.

United States Geological Survey (USGS), 1952 (revised 1994), Ferndale, Washington quadrangle, 7.5-minute topographic series.

United States Geological Survey (USGS), 1977 (revised 1995), Eliza Island, Washington quadrangle, 7.5-minute topographic series.

United States Geological Survey (USGS), 1954 (revised 1995), Bellingham South, Washington quadrangle, 7.5-minute topographic series.

United States Geological Survey (USGS), 1954 (revised 1994), Bellingham North, Washington quadrangle, 7.5-minute topographic series.

United States Geological Survey (USGS), 1952 (revised 1994), Lake Whatcom, Washington quadrangle, 7.5-minute topographic series.

United States Geological Survey (USGS), 1952 (revised 1994), Lawrence, Washington quadrangle, 7.5-minute topographic series.

- United States Geological Survey (USGS), 1980 (revised 1994), Acme, Washington quadrangle, 7.5-minute topographic series.
- United States Geological Survey (USGS), 1972 (revised 1994), Deming, Washington quadrangle, 7.5-minute topographic series.
- United States Geological survey (USGS), 2003, *Water Resources of Washington State: Elevated Levels of Mercury in Lake Whatcom Fish - Identification of Potential Sources and Contributing Factors with Recommendations for Additional Sampling Needed to Determine Sources*, WA467 - Summary Page, accessed through the Internet  
<http://wa.water.usgs.gov/wadmin/Projects/summary.467.htm>.
- United States Smelting and Refining Company, 1958, *Geological Survey of Coal Deposits in Western Whatcom, Skagit, and King Counties, Washington*, Puget Sound Power and Light Company, 141 p.
- Valentine, Grant M., revised by Marshall T. Huntting, 1960, *Inventory of Washington Minerals*, Part I, Second Edition, Nonmetallic Minerals, Bulletin No. 37, State of Washington, Department of Conservation, Division of Mines and Geology.
- Vonheeder, Ellis R., 1975, *Coal Reserves of Whatcom County, Washington*, Open File Report 75-9, State of Washington Department of Natural Resources, Division of Natural Resources.
- Vonheeder, E. R., 1977, *Strippable and Underground Coal Resources on Washington Department of Natural Resources Administered Land, Whatcom County, Washington*, Washington Department of Natural Resources, Division of Geology and Earth Resources, Open File Report 77-3.
- Voyce, Tom, 1944, *Annual Report of Coal Mines for the Year Ending December 31, 1944*, State of Washington Department of Labor and Industries.
- Walsh, Timothy J. and Robert L. Logan, 1989, *Land Subsidence in Washington, in Engineering Geology in Washington*, Volume I, State of Washington Department of Natural Resources, Division of Geology and Earth Resources.
- Washington State Department of Ecology (Ecology), 2004, *Mercury in Lake Whatcom Sediments, Spatial Distribution, Depositional History, and Tributary Inputs*, Publication No. 04-03-019.
- Washington State Department of Ecology (Ecology), July 21, 2004, R. G. Haley site environmental cleanup information, accessed via the Internet at:  
[http://www.ecy.wa.gov/programs/tcp/sites/blhm\\_bay/sites/RG\\_Haley/RG\\_Haley\\_hp.htm](http://www.ecy.wa.gov/programs/tcp/sites/blhm_bay/sites/RG_Haley/RG_Haley_hp.htm)
- Washington State Department of Ecology (Ecology), July 21, 2004, Cornwall Avenue Landfill site environmental cleanup information, accessed via the Internet at:  
[http://www.ecy.wa.gov/programs/tcp/sites/blhm\\_bay/sites/web%20shorts.htm](http://www.ecy.wa.gov/programs/tcp/sites/blhm_bay/sites/web%20shorts.htm)
- Washington State Department of Ecology (Ecology), 2002, *Quality Assurance Project Plan, Mercury in Sediments from Lake Whatcom and Surrounding Lakes: Determination of Spatial and Temporal Patterns and Characterization of Tributary Inputs*, in cooperation with United States Geological Survey and Whatcom County Health Department.

- Washington State Department of Ecology (Ecology), 2001, *Mercury Concentrations in Edible Muscle of Lake Whatcom Fish*, Publication No. 01-03-012.
- Washington State Department of Ecology (Ecology), June 2003, *Focus on Mercury in Fish, Study Finds Elevated Levels in Washington Fish*, Publication No. 03-03-036.
- Washington State Department of Ecology (Ecology), June 2003, *Mercury in Edible Fish Tissue and Sediments from Selected Lakes and Rivers of Washington State*, Publication No. 03-03-026.
- Washington State Department of Ecology (Ecology), 2002, *Quality Assurance Project Plan, Lake Whatcom TMDL Study*.
- Washington State Department of Ecology (Ecology), *Drainage Basin Tracing Study: Phase II, Chemicals Found in Storm Drains, Whatcom Creek and Squaticum Harbor in Bellingham, Washington*.
- Washington State Department of Ecology (Ecology), 2002, *Focus: Lake Whatcom, Cleaning up Water Pollution*, Publication Number 02-10-070.
- Washington State Department of Ecology (Ecology), 1999, *Lake Whatcom Watershed Cooperative Drinking Water Protection Project: Results of 1998 Water, Sediment and Fish Tissue Sampling*, Publication Number 99-337.
- Washington State Department of Health (WDOH), May 2001, *Lake Whatcom Fish Advisory*.
- Watten, Barnaby, 2003, United States Geological Survey, Project Chief, Coal Acid Mine Drainage Project, personal communication with Mark Longtine, E & E, on April 15, 2003, regarding trace metals and other constituents of coal mine drainage.
- W.D. Purnell & Associates, Inc., 1997, *Report: Geotechnical Engineering Feasibility Investigation, 124 East Holly Street, Bellingham, Washington*, for Parking Services, City of Bellingham.
- West Coast Coal Mines, Inc., 1944, Map of Property and Workings of Glen Echo Coal Mine, 1:1200 map showing roads, buildings, streams, elevations, contours, mine workings, and borehole locations.
- Whatcom County, 2003, Tax Assessor's Parcel Maps and Parcel Summary information accessed through the Internet, <http://www.co.whatcom.wa.us/cgi-bin/db2www/assessor/search/RPSearch.ndt/>.
- Whatcom County Coal Mining Company, 1914, *Blue Canyon Mine of the Whatcom County Coal Co.*, 1:1200 map showing roads, railroad tracks, buildings, streams, and mine workings.
- Whatcom Environmental Services, January 29, 2002, *Independent Remedial Action Report, Laurel Corporation - Laurel Street Site, Bellingham, Washington*, prepared for Laurel Corporation.
- Whatcom Environmental Services, February 8, 1999, Letter report to Mr. Ken Hertz, Blossom Development Corporation regarding results of sampling at Laurel Street property.



Willis, Bailey, 1886, *Report on the Coal Fields of Washington Territory*, United States House of Representatives, 47<sup>th</sup> Congress, 2<sup>nd</sup> Session, Misc. Doc., v.13, pt.15 (Misc. Doc. 42, pt. 15).

Willis, Bailey, 1898, "Some Coal Fields of Puget Sound," *United States Geological Survey Annual Report*, 18<sup>th</sup>, Part 3, p.393-436.

## **PROJECT DATA SOURCES:**

### **AGENCY CONTACTS**

Affolter, Ron, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on February 26, 2004, regarding coals in Washington state.

Brownfield, Michael, 2003 and 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on May 1, 2003, regarding coal mines in Whatcom County, Washington, and on February 26, 2004, regarding trace metals in coal and coal waste.

Collins, Janet, 2003, Librarian, Huxley Map Library, Western Washington University, personal conversation with Mark Longtine, E & E, Seattle, on May 12, 2003, regarding historic coal mines in the Bellingham and Lake Whatcom area.

Easterbrook, Don, 2003, Professor, Western Washington University, personal communication with Mark Longtine, E & E, Seattle, on April 18, 2003, regarding abandoned coal mines in Bellingham and Lake Whatcom area.

Fogelsong, Clare, 2003, City of Bellingham, Environmental Manager, personal communication with Mark Longtine, E & E, Seattle, on April 3, 2003, regarding abandoned coal mines in Bellingham, Washington.

Givler, Lynne, 2003, Whatcom County Parks and Recreation, personal communication with Mark Longtine, E & E, Seattle, on June 5 and June 11, 2003, regarding properties owned by Whatcom County and area historic coal mining activities.

Hardy, Sheila, 2003, City of Bellingham, Planning and Community Development, personal communication with Mark Longtine, E & E, Seattle, on March 5, 2003, regarding geotechnical investigations in the vicinity of the Sehome Mine.

Hatch, Joe, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on February 26, 2004, regarding trace metals in coals.

Hood, Steve, 2004, Project contact, Washington State Department of Ecology (Ecology), personal communication with Mark Longtine, E & E, Seattle, on March 3, 2004, regarding the preliminary results of the joint Ecology/USGS Lake Whatcom mercury investigation.

Judge, Janice, 2003, Whatcom County Tax Assessor's Office, personal communication with Mark Longtine, E & E, Seattle, on April 21, 2003, regarding records of historic coal mines in Bellingham and Lake Whatcom area.

Kaldenbach, Ginger, June 25, 2003, Washington State Supervisor, United States Department of the Interior, Office of Surface Mining (OSM), personal communication with Mark Longtine, E & E, Seattle, regarding OSM's investigation of abandoned coal mines in Whatcom County, Washington.

Kolker, Alan, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, on February 26, 2004, regarding the presence of trace metals in coal.

Maginnis, Christina, 2003 and 2004, City of Bellingham, Public Works, Engineering Department, personal communication with Mark Longtine, E & E, Seattle, on June 18, 2003 and February 5, 2004, regarding Manley' Camp and Geneva mines.

McHenry, Greg, 2003, Port of Bellingham, personal communication with Mark Longtine, E & E, Seattle, on June 30, 2003, regarding Port of Bellingham and other property in the vicinity of the Sehome mine.

McInerney, Lucy, 2004, Washington State Department of Ecology, personal communication with Mark Longtine, E & E, Seattle, on September 13, 2004, regarding Cornwall Avenue Landfill site cleanup.

Morrison, Jean, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on February 27, 2004, regarding trace metals in coal.

Myers, Chuck, 2003, United States Department of the Interior, Office of Surface Mining (OSM), Washington, D.C., personal communication with Mark Longtine, E & E, Seattle, regarding abandoned coal mines in Bellingham and Lake Whatcom area.

Palmer, Curtis, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on February 27, 2004, regarding trace metals in coal.

Paulson, Anthony, 2003, Project Leader, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on January 22, 2003, April 8, 2003, and March 19, 2004, regarding the joint USGS/Washington State Department of Ecology Lake Whatcom mercury study.

Rice, Cindy, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on February 27, 2004, regarding coal mine drainage.

Robertson, Greig, 2003, United States Department of the Interior, Office of Surface Mining (OSM), National Map Repository, personal communication with Mark Longtine, E & E, Seattle, on June 16, 2003, regarding availability of maps and other records of historic coal mines.

Rytuba, Jim, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on February 27, 2004, regarding trace metals in coal.

San Juan, Charles, 2004, Washington State Department of Ecology, personal communication with Mark Longtine, E & E, Seattle, on September 13, 2004, regarding Cornwall Avenue Landfill and R.G. Haley site cleanup.

Seal, Bob, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on March 1, 2004, regarding trace elements in coal.

Seymour, Denny, 2003, Land Office, United States Department of the Interior, Bureau of Land



- Management, personal communication with Mark Longtine, E & E, Seattle, on April 23, 2003, regarding General Land Office, Office of Surface Mining, and cadastral survey records as pertinent to historic coal mines in the Bellingham and Lake Whatcom area.
- Sibrell, Phil, 2003, United States Geological Survey, personal communication with Mark Longtine, E & E, on April 15, 2003, regarding trace metals and other constituents of coal mine drainage.
- Smith, Kathy, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on March 2, 2004, regarding trace metals in coal.
- Stoner, Mike, 2003, Port of Bellingham, personal communication with Mark Longtine, E & E, Seattle, on June 25, 2003, regarding Port of Bellingham and other property in the vicinity of the Sehome mine.
- Stroebel, Erica, Whatcom County Water Resources Division, personal communication with Mark Longtine, E & E, Seattle on April 7, 2003, regarding abandoned coal mines in the Bellingham and Lake Whatcom area.
- Vesper, Don, 2003, Environmental Health, Whatcom County Health Department, personal communication with Mark Longtine, E & E, Seattle, on April 2, 2003, regarding coal mines in the Bellingham and Lake Whatcom area.
- Wahl, Tim, 2003, Real Estate Specialist, City of Bellingham, Parks and Recreation Department, personal communication with Mark Longtine, E & E, Seattle, on April 15 and 28, 2003, regarding abandoned coal mines in the Bellingham and Lake Whatcom area.
- Walsh, Timothy, 2003, Geologist, Washington Department of Natural Resources, Division of Geology and Earth Resources, personal communication with Mark Longtine, E & E, Seattle, on April 25, 2003, regarding historic coal mines in the Bellingham and Lake Whatcom area.
- Watten, Barnaby, 2003, United States Geological Survey, Project Chief, Coal Acid Mine Drainage Project, personal communication with Mark Longtine, E & E, on April 15, 2003, regarding trace metals and other constituents of coal mine drainage.
- Waugh, Glen, 2003, United States Department of the Interior, Office of Surface Mining (OSM, Olympia Washington, personal communication with Mark Longtine, E & E, Seattle, on June 16, 2003, regarding abandoned coal mines in the Bellingham and Lake Whatcom area.
- Wenger, Barry, 2003, Washington State Department of Ecology (Ecology), personal communication with Mark Longtine, E & E, Seattle, on May 9, 2003, regarding historic coal mines in the Bellingham and Lake Whatcom area.
- Whitcomb, Tye, 2003, Engineer, Whatcom County, personal communication with Mark Longtine, E & E, Seattle, on April 21, 2003, regarding records of historic coal mines in the Bellingham and Lake Whatcom area.

Zielinski, Robert, 2004, United States Geological Survey (USGS), personal communication with Mark Longtine, E & E, Seattle, on February 26, 2004, regarding coal mine drainage and trace elements in coal.

**PROJECT DATA SOURCES:**

**RESEARCH FACILITY CONTACTS**

Bellingham Public Library  
210 Central Avenue  
Bellingham, Washington 98225  
Margaret Ziegler, Reference Librarian

Center for Pacific Northwest Studies/Washington State Archives: Northwest Regional Branch  
Goltz-Murray Archives Building  
Western Washington University  
Bellingham, Washington 98225-9123

Washington State Department of Natural Resources  
Division of Geology and Earth Resources  
1111 Washington Street SE, Room 148  
P.O. Box 47007  
Olympia, Washington 98504-7007